

APPENDIX F

PROJECTS TO ADDRESS STATE'S NATURAL RESOURCE DAMAGES CLAIM

WEST KINGSTON TOWN DUMP/URI DISPOSAL AREA SUPERFUND SITE

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UNIVERSITY OF RHODE ISLAND

PROJECTS TO ADDRESS THE STATE OF RHODE ISLAND'S NATURAL RESOURCE DAMAGES CLAIM ASSOCIATED WITH THE WEST KINGSTON SUPERFUND SITE

1. Connection of the University's Liberty Lane Well to the Local Water System:

In the 1980's, the University negotiated for the acquisition of a laboratory building and associated land holdings and infrastructure at 530 Liberty Lane in West Kingston, Rhode Island. The building was located in a small complex of industrial properties south of Liberty Lane that were jointly served by a water supply derived from a well north of Liberty Lane obtained by the University in conjunction with the property transaction.

In 1997, with increasing industrial and commercial development in the West Kingston area, municipal sewer and water service was extended along Fairgrounds Road and Liberty Lane to serve the expanded development in that vicinity. The University elected at that time, along with the other properties served by the University's well, to have its laboratory facility connected to the municipal water system operated by the Kingston Water District.

The University's Liberty Lane well, while disconnected from service lines, has since been maintained and exercised by the University, preserving its function and value as a viable potable water supply.

The well was installed in December 1960 and draws from the western portion of the Chipuxet Aquifer. It is a 24" by 18" gravel packed well driven to a depth of 70' with a 25 H.P. vertical turbine pump and had a tested daily withdrawal rate capacity at the time of construction of 725 gallons per minute or 1,040,000 gallons per day. It is located in a structure within a fenced area on a 40,000 sq. ft. parcel and is powered presently by a 75 KW propane powered generator, but has access to power from National Grid if reconnected. A right of way enables service access to the well site.

URI shall, subject to approval of the Board of Governors for Higher Education and the State Properties Committee, transfer the Liberty Lane well to the Kingston Water District, enabling this well to be connected to the Kingston Water District service lines at Fairgrounds Road. This would bring new water capacity into the Kingston Water District System from a groundwater source 1.2 miles west of its primary supply wells located on University property near the intersection of Route 138, Ministerial Road, and Plains Road in Kingston, Rhode Island.

URI shall submit the proposed transfer of the Liberty Lane well to the Kingston Water District for approval to the Board of Governors for Higher Education at its August 18, 2008 meeting and, upon its approval, to the Rhode Island State Properties Committee at its September 4, 2008 meeting. URI shall transfer the Liberty Lane well within 60 days of approval of the transfer by the Rhode Island State Properties Committee.

2. Water Conservation Measures at the East Farm Aquaculture Facility:

The Freshwater Aquaculture Center, operated by the Fisheries, Animal, and Veterinary Science Program on the University's East Farm property in Kingston, Rhode Island, is an aquaculture research facility served by four primary fish rearing tanks. The system uses "once-through" municipal water from the Kingston Water District wells. Municipal water is delivered to the tanks and then discharged to an outdoor settling pond. There is presently no recirculation of water. Average daily water consumption is presently 144,000 gallons or over 52,500,000 gallons per year.

The proposed project will install recirculation systems to reduce municipal water use and associated withdrawals from the Chipuxet Aquifer. The recirculation system includes ultraviolet filters, bead filtration systems, bio-filtration and degassing systems, piping, and monitoring and control systems. Two chillers and auxiliaries will be installed to maintain the temperature of the process water. With such a system in place, projections indicate that 90% of the water used could be re-circulated. Annual consumption could be reduced to 5,200,000 gallons per year, preserving the groundwater resource.

On or before September 1, 2008, URI shall submit to RIDEM an Implementation Plan that shall include a description of all equipment to be installed, estimated costs, and a timetable for implementation, which shall provide for the installation and operation of all equipment by December 31, 2009.